

Momentum

Breaks

Bowling

going down a hill

Weight / momentum

Car moving

Something making something else move

The ability of an object to continue moving as a function of its mass

Javelin

Drive to hoop

Movement

Speed



momentum is how hard it
is to STOP something

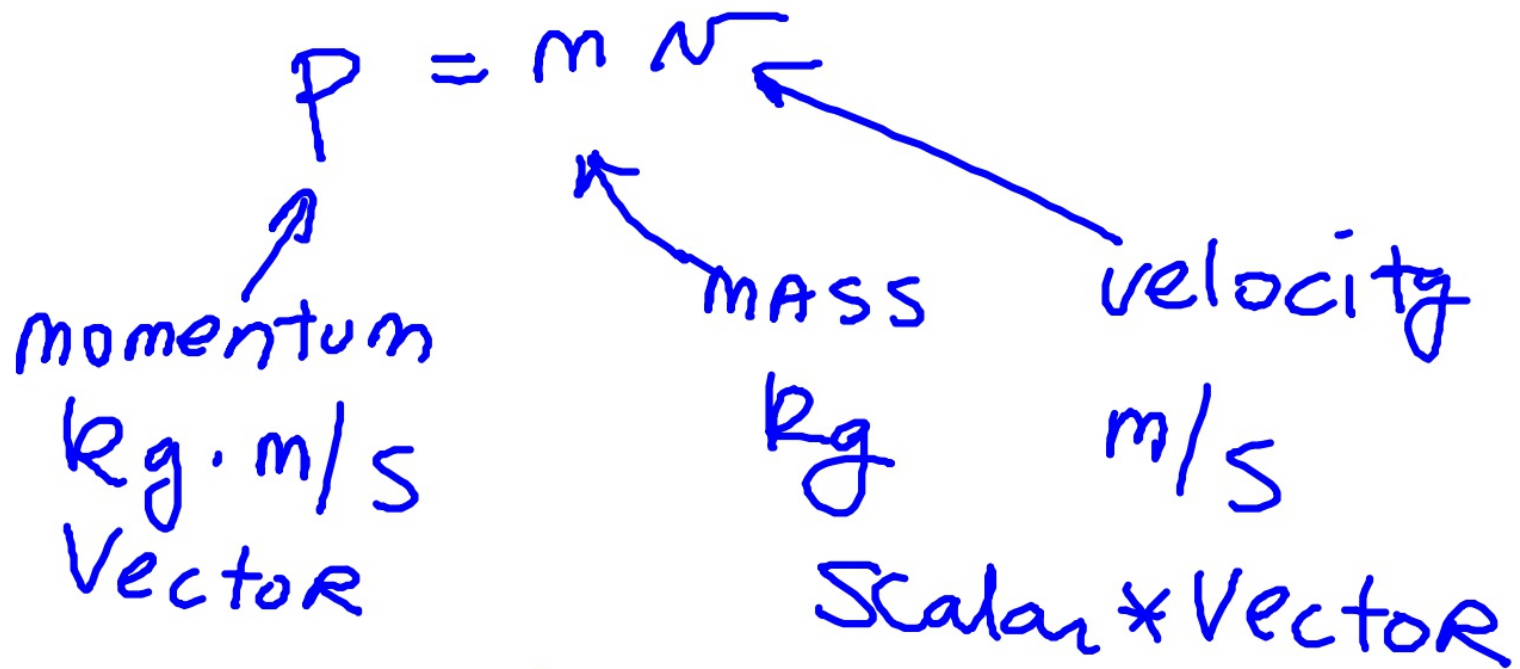
$$P = m v$$

momentum
kg · m/s
Vector

mass
kg
Scalar

velocity
m/s
Vector

Scalar * Vector



direction is the same as its
velocity

Does A 500,000 Kg TRAIN
STANDING STILL HAVE momentum

NO, Because the Train

is not moving AND

therefore has NO Velocity

$$P = mv^0$$

TRAIN @ 500,000kg is moving
at .5 m/s West. What is its
momentum?

$$p = 250,000 \text{ kg} \cdot \text{m/s West}$$

The Biker has a mass of
100kg how fast would he
have to travel to have the
Same momentum as the train?

$$v = 2500 \text{ m/s West}$$